POLITÉCNICA

Opportunities and Challenges of Mobile Social Networks

Source: indigo-moogle.deviantart.com

MASELTOV

Workshop of the MASELTOV project

Mobile services for immigrant people: learning, information, and community building for employment and integration

Barcelona

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BACKGROUND (I)

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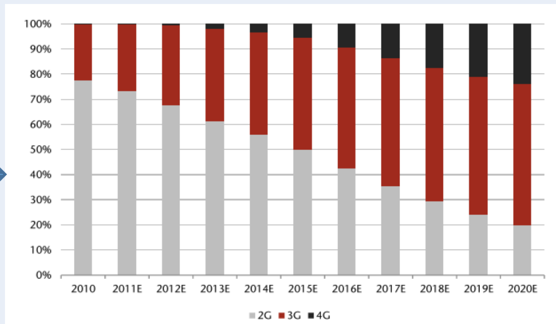
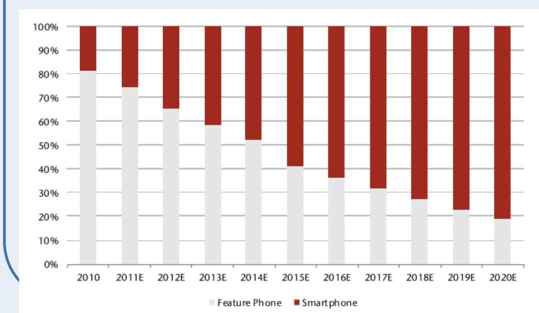
- Increasing **availability** (and affordability) of **mobile broadband**
  - In 2015 half of the subscriber base will be in 3G/**4G**, and 80% in 2020 (27% in 2011)
  - 7.6 billion mobile users by 2020 (5.4 billion in 2011). Mobile subscribers per 100 inhabitants: **99%**.



Source: Jefferies (2011)



- Increasing **availability** (and affordability) of **smartphones**
  - In 2020 **81%** of phones sold globally will be smartphones (2.5 billion) from 26% in 2011 (400 million)
  - 595 million **tablets** in 2020 (70 million in 2011)

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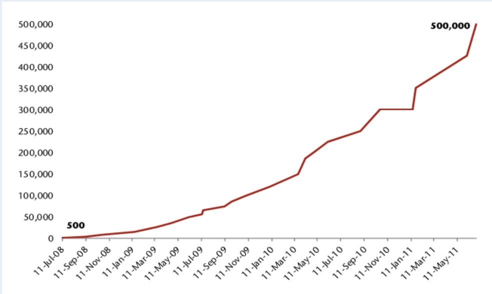
BACKGROUND (II)
Apple, Google and the rise of the platforms and the "apps" economy

- In three years (2008-2011) the **number of apps** available for download in the Apple platform has grown from 500 to 500,000 (April 2012 -> 600.000)
- App stores have changed the **value chain of software** (distribution and pricing), and also the industries of music, books, games, …
- How to **control** a platform? **Proprietary** vs. "**open** but not open". The **gateway** roles (customers, developers, advertisers, …)



Source: Apple (2011)

➔ App stores vs. mobile web **browsers**

➔ Mobile platforms as **multi-sided markets**

➔ **Market power** with regard to developers, advertisers and **consumers**

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MOBILE MEDIA
Summary

Market segment	2011 (B$)	2012E (B$)	Growth y-y (%)
Data plans	76	83	9,5
Apps	20[2]	26[1]	31
Social networking	**15**	**18**	**16**
Games	-	8	-
In-game items	2.1	2.5	18
Music	-	16	-
Video	2.9[4]	3.6[3]	24
Total advertisers spending	6.3	11.6	85
Total consumer spending	122	138	13
TOTAL	128	150	17

(1) 32 billion apps downloaded in 2012
(2) 23 billion apps downloaded in 2011
(3) 280 billion videos watched on mobile devices in 2012
(4) 108 billion videos watched on mobile devices in 2011

Source: adapted by the author from industry data (Informa Telecoms and Media, Interactive Advertising Bureau, IPTS, Juniper Research, Strategy Analytics, PwC)

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MOBILE SOCIAL NETWORKS (I)

Facebook: the biggest mobile social network is a social network on a mobile

- Monthly **minutes spent on social networking** sites grew 50% in 2011
- Total monthly **unique visitors** was over 200 million in 2011
- The rise of the **hyper-connected user**, broadcast of intentions and always-on
- Targeted / **behavioural advertising** as the main business model based on network effects and increase of users' time on social networks

➔ **"Digital shadows"** of users, the challenges to privacy / personal information. Privacy threats. Differences EU vs USA

facebook

	2011	2010
Yearly revenues	3.711 M$	1.974 M$
Annual revenues growth	88%	
Number of users (millions)	845	350
Annual users growth	140%	
Growth rate	8,39 users per second	
Daily reach (% of internet users that visit per day)	40 %	30%
Revenues per user ($)	4,39	5,64
Type of information	Videos, images, text	
Field	Social	
Range of countries	Worldwide (exc. China)	

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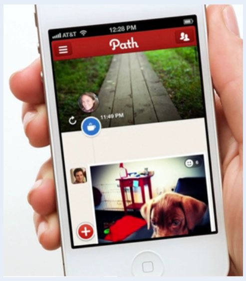
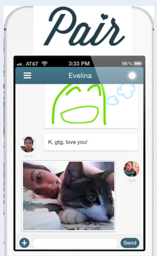
MOBILE SOCIAL NETWORKS (II)

The new and smaller social networks



- Path ("share the journal of your life"), a social network only for smartphones, has a **maximum of 150 friends** (the Dunbar number). It has about one million active users (2012). No subgrouping and no privacy settings
- According to Dunbar: 150 is an outer boundary of friends, 50 is the limit for trusted friends, 15 for good friends, and 5 for best friends. Average number of friends in Facebook is 245 (Pew Research Centre, 2012)
- FamilyLeaf is restricted to **family members** and requires a "gatekeeper", mainly designed for photo sharing
- Pair, also only for smartphones, allows **only one other person**, and allows for drawing together, sharing a to-do list or location, and includes "thumbkissing". It has got 100.000 users in just seven days.



➔ Sharing requires **intimacy**

➔ The relevance of **contextual integrity** (H. Nissembaum, 2010): informational rules attached to the personal information transaction.

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MOBILE SOCIAL NETWORKS (III)

Twitter: social real-time information

twitter

- The power of **microblogging**: 140 million active users (2012) and 340 million tweets daily
- Unregistered users can read the tweets
- Followers, hashtags and trending topics
- Increasing relevance in the **social and political** domain (Arab spring, US elections, ...).
- Growth in regions other than EU and US.

Visitation to Twitter.com by Global Regions
June 2010 vs. June 2009
Total Audience, Age 15+ - Home & Work Locations[1]
Source: comScore Media Metrix

	Unique Visitors (000)		
	Jun-09	Jun-10	% Change
Worldwide	44,520	92,874	109
Latin America	3,792	15,377	305
Asia Pacific	7,324	25,121	243
Middle East - Africa	2,058	4,987	142
Europe	10,956	22,519	106
North America	20,390	24,870	22

➔ Level of **digital literacy** to use these tools? (specific apps to send tweets on a mobile, avoiding SMS, ...)

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MOBILE SOCIAL NETWORKS (IV)

Gaming the system, while testing new technologies and business models

- Before 2002 **games embedded** in the handset
- Up to 2007: **game portals**
- **Dramatic change** in 2007 with "first wave of **smartphones**"
- From 2008, no longer it is a delayed-in-time "poor brother" of console and pc games, but a **distinct and exciting experience** and a new wide ecosystem (Angry Birds, Zynga-FarmVille, ...)

➔ Wide **demographics**, **ubiquity**, personal, social and **context-aware**
➔ Innovations in business models: **in-apps revenues**
➔ Niche markets – the education "connection" – **serious games**
➔ **Consumer protection**: content rating, childhood protection
➔ **Data roaming**

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MOBILE SOCIAL NETWORKS (V)

Foursquare: checking in the real world with virtual information

foursquare

- Mobile social network based on **location** with 20 million users (2012) and more than 3 million check-ins daily
- Check-ins, badges and mayorships
- Competing with friends while leaving **tips** and to do lists
- "Groupon" (**discounts** / coupons) on a mobile
- The "**discovery**" experience

➔ **mcommerce** and **mpayment** (Google Wallet's, PayPal, Barclays PayTag, Verizon Isis, Square, …). Mobile payments could eliminate the need for consumers to carry cash or credit cards by 2020 (Pew Internet Research, 2012)

➔ The relevance of **location**

➔ More **targeted advertising**

➔ The "Please rob me" case … **Privacy by law** and / or **privacy by design**

➔ **Mobile device as the tool to bridge the real and virtual worlds**

MOBILE SOCIAL NETWORKS (VI)

Tablets, the unexpected game changers in mobile video

- **Standardisation support** since 2007 (DVB-H), currently in a "**limbo**"
- Commercial launches using major events (olympics, football)
- Some **modest success stories**: Japan and Korea
- **Notorious failures** (BBC 2008) and **limited response** from EU markets (≈ 5 million users)
- "**Impasse**" situation with **divergent technological options**: broadcasting vs mobile comms

➔ Lack of perceived **value and usefulness** from users on a mobile handset while on-the-go

➔ **Unexpected behaviour** of users: at home, after prime-time, long time view, …

➔ Internet-enabled mobile devices (**tablets**). The increasing relevance of devices

➔ Viewers migrating from traditional linear schedules to **on-demand viewing**

➔ Watching TV is also **social**

➔ **Free-to-air** (advertising-based) vs. pay-per-view

➔ Video streaming impact on **network performance** (traffic x70 until 2018)? Off-loading, Investments, network neutrality and spectrum management

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MOBILE SOCIAL NETWORKS (VII)
Linkedin: the access to the professional world

- ➔ **Trust** through “gated-access”
- ➔ Interest **groups**
- ➔ **Professional networking**
- ➔ **Job** opportunities

	2011	2010
Yearly revenues	522 M$	242 M$
Annual revenues growth	115%	
Number of users (millions)	150	70
Annual users growth	115%	
Growth rate	2 members per second	
Daily reach (% of internet users that visit per day)	4 %	3%
Revenues per user ($)	3,48	3,46

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MOBILE SOCIAL NETWORKS (VIII)
The new informed customer

- **Social**
- **Price** comparison
- **Barcode** scanning
- Shopping lists

- ➔ Increasing transparency and competition
- ➔ “Crowd power”

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MOBILE SOCIAL NETWORKS (IX)
Video-learning on a mobile

- The power of **video-sharing**
- The rise of the **prosumer**

→ **Free education**
→ **mlearning**
→ **Augmented reality**
→ Virtual environments

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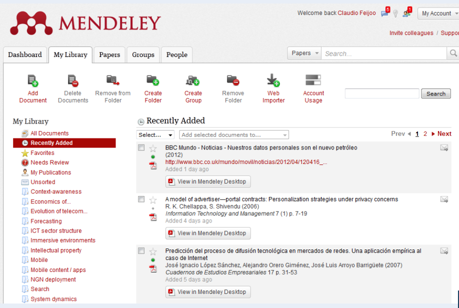
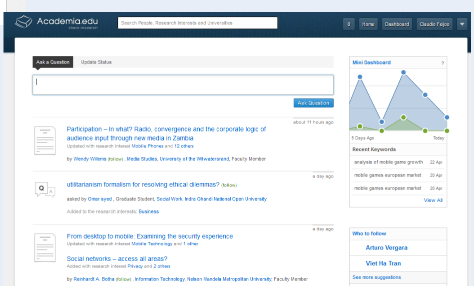
MOBILE SOCIAL NETWORKS (X)
Networking and sharing research





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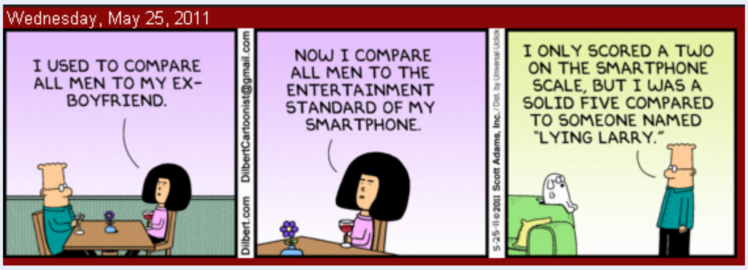
MOBILE SOCIAL NETWORKS (XI)

Flirting services: pioneers in success

- ➔ Mobile media in our **digital lives**
- ➔ The mobile device is (much more) **personal** (and **private** than a regular Internet connection / desktop)



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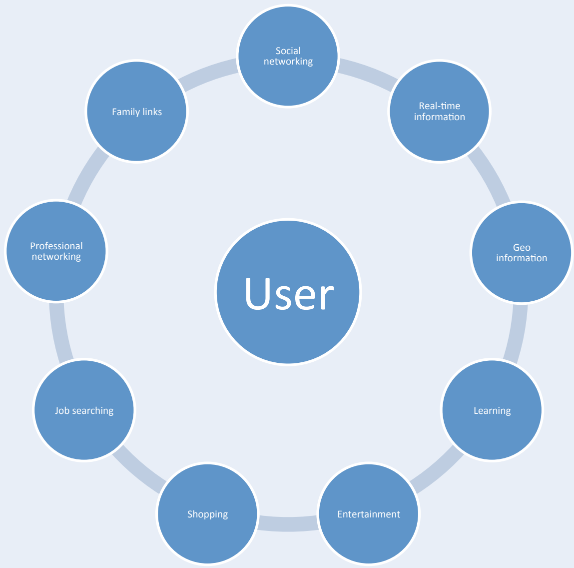
MOBILE SOCIAL NETWORKS
Summary



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